

Serial No. 09/327,351

2

REMARKS

Applicants wish to thank the Examiner for considering the present application. In the Office Action dated May 17, 2005, claims 1-33 are pending in the application. Applicants respectfully request the Examiner to reconsider the rejections set forth below.

Claims 6 and 27 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description.

In response to the Office Action of May 8, 2002, the wording from claims 6 and 27 was added to the specification. Therefore, Applicants respectfully submit that this rejection was overcome at that time.

Claims 1-5, 9, 11-26, and 28-33 stand rejected under 35 U.S.C. §102(e) as being anticipated by *Wainfan* (6,032,041). Applicants respectfully traverse.

For a proper §102(e) rejection, each and every element of the claims must be found in the cited reference. Applicants respectfully submit that each and every element of Claim 1 is not found in the *Wainfan* reference.

Claim 1 is directed to a satellite communication system that has a plurality of satellites each having a ground link for communicating with a ground station, an optical link for communication with at least one of the plurality of satellites. The *Wainfan* reference does teach a plurality of satellites, an RF ground link and an optical intersatellite link. Claim 1 further recites that each of the satellites have a reconfigurable optical transmitter and a reconfigurable optical receiver for sending and receiving data streams, each reconfigurable optical transmitter having an optical carrier associated therewith. For these recitations the Examiner points to the intersatellite links 36, Figure

Serial No. 09/327,351

3

4, Col. 4, lines 28-42, Col. 5, lines 14-16, Col. 6, lines 52-60. Applicants admit that an optical intersatellite link is taught in the *Wainfan* reference. However, Applicants have reviewed the portions set forth by the Examiner. Column 4, lines 28-42, and Col. 5, lines 14-16, refer to RF beams that are spot beams directed toward the ground and not to optical beams. The passage in Col. 4 specifically refers to the fact that beams may be transponded directly back to the same beam, switched to another beam, or relayed by intersatellite link through other satellites that form a global network for the transport of real-time voice and data signals. The passage from Col. 5 refers to spot beams that are directed back to the earth. The passage from Col. 6 merely describes the intersatellite links but not the reconfigurability thereof. Applicants respectfully submit that reconfigurable optical transmitters and reconfigurable optical receivers are not taught or suggested.

Claim 1 further recites a plurality of satellites arranged to have a first subset of satellites wherein the first subset of satellites are configured to communicate therebetween as a first local area network over a landmass. Also, Claim 1 recites that the plurality of satellites are arranged to have a second subset of satellites having at least one satellite different than that of the first subset and at least one second satellite the same as the first subset. The second subset of satellites are configured to communicate therebetween as a local area network over the landmass. The Examiner cites Figs. 1-3 and Col. 5, lines 14-16 for this proposition. Applicants, however, refer the Examiner back to Col. 4, line 41 which states that the satellite form a global network. The last two clauses of Claim 1 specifically recite a local area network over a landmass. Although

Serial No. 09/327,351

4

there are several satellites illustrated in the *Wainfan* reference, they do not form a local area network over a landmass. Instead, the satellites set forth in the *Wainfan* reference form a network that is global without forming a local area network over a landmass. Applicants can find no specific teaching for a local landmass in the *Wainfan* reference. Also, a second subset is also not illustrated in the *Wainfan* reference. As mentioned, the *Wainfan* reference provides a global network and not a local area network.

Claims 2-5 and 9 are dependent from Claim 1 and are believed to be allowable for the same reasons set forth above.

Claim 11 is directed to a global communication system having a plurality of satellites spaced about the earth, a first subset of the plurality forming a local area network over the landmass. The first subset has a first plurality of optical carriers assigned thereto for inner communication. The first subset has a second plurality of optical carriers assigned thereto for communicating with other satellites outside of the first subset. As mentioned above, Applicants respectfully submit that there is no local area network set forth in the *Wainfan* reference. Because there is no local area network, the teaching of optical carriers for inner communication and optical carriers for communicating with other satellites outside of the first subset is also not set forth. Applicants therefore respectfully request the Examiner for reconsideration of Claim 11.

Claims 12-16 are also believed to be allowable for the same reasons set forth above since these claims are dependent upon Claim 11.

Independent Claim 17 is directed to a method of communicating with a satellite communication system that includes grouping satellites into a first local area network

Serial No. 09/327,351

5

over a first landmass having a first subset fewer than the plurality of satellites. A plurality of routes are formed between the satellites in the first local area network and optical carriers are assigned for each route. As described above, no teaching or suggestion is provided for a local area network in the *Wainfan* reference. Applicants therefore respectfully request the Examiner to reconsider the rejection of Claim 17.

Likewise, Claims 18-21 are dependent upon Claim 17 and are believed to be allowable for the same reasons set forth above.

Claim 22 is directed to satellite constellation that includes a plurality of satellites wherein each of the satellites has a reconfigurable optical transmitter and a reconfigurable optical receiver. As mentioned above with respect to Claim 1, no teaching or suggestion is provided for a reconfigurable optical transmitter or reconfigurable optical receiver. Also, no subsets of the satellites are set forth in the *Wainfan* reference as described above with respect to Claim 1. Applicants therefore respectfully request the Examiner to reconsider the rejection of Claim 22.

Likewise, Claims 23-26 are dependent upon Claim 22 and are believed to be allowable for the same reasons set forth above.

Claim 28 is directed to a global communication system that includes a plurality of satellites spaced about the earth, a first subset of satellites forming a first local area network and a second subset of said plurality of satellites forming a second local area network having a second plurality of optical carriers assigned thereto, the first subset having a third plurality of optical carriers assigned thereto for communicating with the second subset. As mentioned above, no teaching or suggestion is provided for a subset or

Serial No. 09/327,351

6

a local area network in the *Wainfan* reference. Applicants therefore respectfully request the Examiner to reconsider the rejection of Claim 28.

Likewise, Claim 29 depends from Claim 28 and is allowable for the same reasons.

Claim 30 is directed to a method of communicating within a satellite communication system including deploying a plurality of satellites, grouping a first set of satellites of the plurality of satellites into a first local area network and superceding the first subset by grouping a second subset of the plurality of satellites into a second local area network so that at least one satellite of the second subset of plurality of satellites is different than that of the first subset of satellites. This claim is also believed to be allowable since forming subsets and local area networks is not taught or suggested in the *Wainfan* reference.

Likewise, Claims 31-32 are believed to be allowable for the same reasons set forth above.

Claim 33 depends from Claim 18 and is believed to be allowable for the same reasons set forth above with respect to Claim 18.

Claims 1-6, 9, and 11-33 stand rejected under 35 U.S.C. §102(e) as being anticipated by *Brock* (5,870,216). Applicants respectfully traverse.

The Examiner points to the *Brock* reference for having a reconfigurable optical transmitter and optical receiver. The Examiner points to reference numeral 44 of Fig. 1 for the optical transmitter and reference numeral 22 of Fig. 1 for the optical receiver. Applicants have reviewed Fig. 1 and the corresponding description and can find no teaching or suggestion for a reconfigurable optical transmitter and receiver. In fact, a

Serial No. 09/327,351

7

word search of the reference reveals that the word reconfigurable is never used in the document.

Applicants acknowledge that the *Brock* reference illustrates a number of satellites in Fig. 1. The satellites, however, do not form a first local area network over a landmass and a second local area network over a landmass. The Examiner points to satellites 12 and 26 that are configured to communicate therebetween with the ground stations 16 and 24. The Examiner points to satellites 18 and 12 for forming a second local area network. However, no teaching or suggestion is provided for a grouping into a network. Applicants respectfully request the Examiner to reconsider the rejection of Claims 1-6, 9, and 11-33.

Claims 7, 8 and 10 stand rejected under 35 U.S.C. §102(e) as being unpatentable over *Brock* in view of *Grant* (5,119,225). Applicants respectfully traverse.

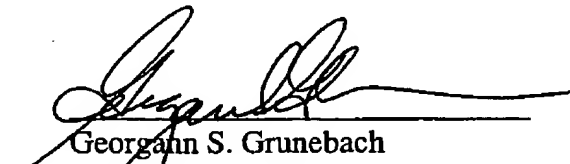
Claims 7, 8 and 10 are dependent upon Claim 1. Claim 7 recites that the satellites are in low earth orbit, Claim 8 recites the satellites are in medium earth orbit, and Claim 10 recites that the subset comprises seven satellites using three optical carriers. The *Grant* reference does teach LEO satellites, however, it appears that medium earth orbit satellites are not taught or suggested. With respect to Claim 10, the Examiner points to Fig. 1 of *Grant* for seven satellites using three optical carriers. Claim 1 illustrates one GEO satellite and three LEO satellites. Applicants can find no teaching or suggestion for three optical carriers and seven satellites in a subset. Applicants therefore respectfully request the Examiner to reconsider the rejection of Claims 7, 8 and 10 as well.

Serial No. 09/327,351

8

In light of the remarks above, Applicants submit that all rejections are now overcome. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments, the Examiner is respectfully requested to contact the undersigned attorney.

Respectfully submitted,



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